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SENATE

{ REPORT
106-181

CHESAPEAKE BAY RESTORATION ACT OF 1999

OCTOBER 13, 1999.—Ordered to be printed

Mr. CHAFEE, from the Committee on Environment and Public
Works, submitted the following

REPORT

[to accompany S. 492]

[Including cost estimate of the Congressional Budget Office]

The Committee on Environment and Public Works, to which was referred the bill (S. 492), to amend the Federal Water Pollution Control Act to assist in the restoration of the Chesapeake Bay, and for other purposes, having considered the same, reports favorably thereon and recommends that the bill do pass.

GENERAL STATEMENT AND BACKGROUND

The Chesapeake Bay (the Bay) is the largest estuary in the United States, and the first estuary in the nation to be targeted for restoration as a single ecosystem. The Bay covers 4,431 square miles, and the Bay watershed covers 64,000 square miles including areas of Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, and the District of Columbia. Over 100,000 streams and rivers drain into the Bay, with the Susquehanna River draining 42 percent of the watershed. The Bay is a national and regional resource which provides millions of pounds of sea food, functions as a center for shipping and commerce and is home to thousands of species of wildlife. In 1983, Maryland, Pennsylvania, Virginia, the District of Columbia, and the Environmental Protection Agency (EPA) signed the Chesapeake Bay Agreement, which established the Chesapeake Bay Program (CBP).

The Chesapeake Bay Program has evolved considerably since 1983 and has become a model for other estuary restoration and protection programs around the world. The 1987 Chesapeake Bay Agreement (the Agreement) expanded the initial restoration efforts by targeting nutrient over-enrichment as the Bay's major problem and establishing a goal to reduce nutrients flowing into the Bay by 40 percent. The Agreement included 28 other specific commitments to address key issues in habitat, water quality, population growth, public information and public access. The 1992 amendments to the Agreement moved the program upriver and committed the 40 percent nutrient reduction goal to the ten major tributaries of the Bay beyond the year 2000.

EPA's participation in the CBP was formally authorized by the Water Quality Act of 1987. Section 117 of the Act created the Chesapeake Bay Program office within the EPA. The office helps to coordinate State and Federal efforts to restore and protect the Bay, makes information available to the public and conducts scientific research on the Bay. Section 117 authorized \$3 million annually to support the activities of the CBP office and \$10 million annually for matching interstate development grants.

The Bay has shown marked improvement since the first Chesapeake Bay Agreement was signed in 1983. Phosphorous loads to the Bay have declined by 6 million lbs. per year between 1985 and 1997, and the Chesapeake Bay Program expects to reach the 40 percent reduction goal by the year 2000. Nitrogen loads have declined by 32 million lbs. per year, but more will need to be done to meet the year 2000 nitrogen reduction goal. Toxic pollutant loads have been reduced by 67 percent from 1988 levels. The reduction in nutrients and toxic pollutants has been accompanied by a recovery in the Bay's living resources. Striped Bass stocks have been officially declared restored. The Bald Eagle population is recovering and has been reclassified as threatened rather than endangered. An estimated 70,000 acres of eel grass beds have been restored.

While much progress has been made in restoring the Bay, considerable work remains to be done. In 1998, the Chesapeake Bay Foundation, a nonprofit group dedicated to preserving and restoring the Chesapeake Bay, released the first annual State of the Bay Report. The Report examined 12 factors relating to the health of the Bay. These factors included population levels of living resources and acres of wetlands and submerged aquatic vegetation. Based on these 12 environmental factors, the Chesapeake Bay Foundation rated the Bay's health at a 27 on a scale of 0-100. The main problems facing the Bay are nutrient enrichment, population growth and development, habitat loss and degradation, toxic substances, and fishery stability. Despite significant reductions in nutrient loadings achieved under the agreement, nutrient over-enrichment remains the most serious problem facing the Bay.

An area of growing concern relates to land use changes occurring in the Chesapeake Bay watershed. Between 1985 and 1997, suburban and urban land use increased by 413,000 acres, forest and wetlands declined by 264,000 acres and 158,000 acres of agricultural land was converted. The expansion of residential development away from urban centers has required the building of more roads

and other infrastructure. Between 1970 and 1997, vehicle miles traveled increased by four times the rate of population in the Bay region. While saltwater wetlands losses have decreased in the bay, freshwater wetlands are being lost at an increasing rate.

S. 492, introduced by Senators Sarbanes and Warner, would reauthorize the Chesapeake Bay program and strengthen the Federal commitment to Bay restoration and protection. The bill is almost identical to provisions included in S. 1222 relating to the Chesapeake Bay Program office. S. 1222 was introduced by Senator Chafee in the 105th Congress. The bill passed the Senate by unanimous consent but was not acted on by the House.

OBJECTIVES OF LEGISLATION

The purpose of this legislation is to amend section 117 of the Clean Water Act to strengthen efforts to restore and protect Chesapeake Bay. The bill reauthorizes the Chesapeake Bay program through fiscal year 2005 at \$30 million per year, provides authority to the Administrator for a small watersheds grants program, and requires Federal agencies to comply with the Chesapeake Bay Agreement and other Federal plans.

SECTION-BY-SECTION ANALYSIS

Section 1. Title

This section cites the title of the bill as the “Chesapeake Bay Restoration Act of 1999.”

Section 2. Findings

This section provides the findings of the Congress regarding the threats to the Bay and the need for an expansion of Federal support for monitoring, management, and restoration activities in the Chesapeake Bay in order to meet and further the goals of the Chesapeake Bay Program.

Section 3. Chesapeake Bay

In order to ensure effective implementation of these commitments, this section amends section 117 of the Federal Water Pollution Control Act to reauthorize and strengthen the Chesapeake Bay Program. It directs the Administrator of the Environmental Protection Agency to continue the Chesapeake Bay Program Office in Annapolis. The Chesapeake Bay Program is to continue its leadership and technology transfer to other groups participating in the National Estuary Program, particularly in the following areas: (1) nutrient reduction through new technologies, such as biological nutrient removal; (2) air deposition of nitrogen to estuarine and coastal waters; (3) computer modeling; and (4) environmental indicators with an emphasis on measuring improvements to living resources.

This section specifically enables the Administrator: (1) to enter into interagency agreements with other Federal agencies; (2) to continue to give technical assistance grants to nonprofit private organizations and individuals, State and local governments, colleges, universities and interstate agencies; and (3) to provide implementation and monitoring grants to signatory jurisdictions.

Subsection (f) provides new authority to ensure that Federal facilities in the Chesapeake Bay Watershed participate in the CBP and in local efforts to restore and protect the Bay and its tributaries. Each Federal facility adjacent to the Chesapeake Bay or its tributaries should ensure that the public has access to the shoreline and water to the maximum extent feasible, considering public safety and national security. All Federal agencies with projects or grants relating to restoration, or other activities in the Chesapeake Bay watershed shall submit a report to the President describing the plans for expenditure of such funds.

Subsection (g) directs the Administrator to ensure that signatory jurisdictions update, expand, and begin implementing their tributary-specific management strategies within 1 year of the date of enactment of the bill. The strategies should include nutrient reduction targets as well as water quality requirements necessary for living resources, toxics reduction and prevention components, and habitat restoration and protection components. This subsection also establishes the Small Watershed Grants program as a permanent part of the Chesapeake Bay Program.

Subsection (h) requires the Administrator and the Chesapeake Bay Executive Council to complete a comprehensive report on the Chesapeake Bay Program.

Subsection (i) directs the Administrator, in cooperation with the scientific community of the Chesapeake Bay, to examine the impact of improvements in water quality on the response of living resources of the Chesapeake Bay ecosystem.

Subsection (j) reauthorizes the Chesapeake Bay Program through fiscal year 2005 at \$30 million per year.

REGULATORY IMPACT STATEMENT

In compliance with section 11(b) of rule XXVI of the Standing Rules of the Senate, the committee makes the following evaluation of the regulatory impact of the reported bill. The reported bill will have no regulatory impact. This bill will not have any adverse impacts on the personal privacy of individuals.

MANDATES ASSESSMENT

In compliance with the Unfunded Mandates Reform Act of 1995 (Public Law 104-4), the committee finds that S. 492 would impose no intergovernmental unfunded mandates on State, local, or tribal governments. The Unfunded Mandates Reform Act defines an intergovernmental unfunded mandate as one which imposes an enforceable duty and has a direct cost in excess of \$50,000,000. While S. 492 contains language directing the EPA and the Chesapeake Bay Executive Council to “ensure that management plans are developed and implementation is begun by signatories to the Chesapeake Bay Agreement to achieve and maintain” the various goals and objectives of the Agreement, the bill contains no specific requirements for the management plans. The development of management plans is a collaborative process between the signatories to the Agreement, the Executive Council, and the EPA. The signatory consequently determines the resources expended on development

and implementation of the management plan. The bill does not directly impose any private sector mandates.

LEGISLATIVE HISTORY

On March 2, 1999, Senators Sarbanes and Warner introduced S. 492, a bill to expand and strengthen cooperative efforts to restore and protect the Chesapeake Bay and to achieve the goals established in the Chesapeake Bay Agreement. On September 29, 1999, the Committee on Environment and Public Works held a business meeting to consider S. 492. The bill was favorably reported by voice vote.

HEARINGS

On July 22, 1999, the Environment and Public Works Committee held a hearing on coastal legislation in Washington, D.C. The hearing focused on six bills: S. 835, the Estuary Habitat Restoration Partnership Act of 1999; S. 878, a bill to amend the National Estuary Program; S. 492, the Chesapeake Bay Restoration Act of 1999; S. 1119, a bill to reauthorize the Coastal Wetlands Planning, Protection and Restoration Act; S. 522, the Beaches Environmental Assessment, Closure, and Health Act of 1999; and H.R. 999, the Beaches Environmental Awareness, Cleanup, and Health Act of 1999. Testimony was provided by the Honorable Robert G. Torricelli, New Jersey; the Honorable John B. Breaux, Louisiana; the Honorable Paul Sarbanes, Maryland; the Honorable J. Charles Fox, Assistant Administrator for Water, U.S. Environmental Protection Agency; the Honorable Michael L. Davis, Deputy Assistant Secretary for Civil Works, Department of the Army; Mr. Martin L. Pagliughi, Mayor, the Burrow of Avalon; Mr. Ted Danson, President, the American Oceans Campaign; Ms. Linda Shead, Executive Director, the Galveston Bay Foundation; Mr. Richard Ribb, Director, Narragansett Bay Estuary Program, Rhode Island Department of Environmental Management; Mr. Michael Hirshfield, Senior Vice President, Chesapeake Bay Foundation; and Dr. Len Bahr, Coastal Advisor to the Governor, State of Louisiana.

COST OF LEGISLATION

Section 403 of the Congressional Budget and Impoundment Control Act requires that a statement of the cost of the reported bill, prepared by the Congressional Budget Office, be included in the report. That statement follows:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, October 7, 1999.

Hon. JOHN H. CHAFEE, *Chairman,*
Committee on Environment and Public Works,
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for S. 492, the Chesapeake Bay Restoration Act of 1999.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contacts are Susanne S. Mehlman (for federal costs), who can be reached at 226–2860, and Shelley Finlayson (for the State and local impact), who can be reached at 225–3220.

Sincerely,

DAN L. CRIPPEN.

CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

S. 492, Chesapeake Bay Restoration, As ordered reported by the Senate Committee on Environment and Public Works on September 29, 1999

Summary

S. 492 would authorize the appropriation of \$30 million for each of fiscal years 2000–2005 for the Environmental Protection Agency (EPA) to continue activities associated with its Chesapeake Bay program, including conducting studies on the status of efforts to restore the bay and the response of plants and animals to improvements in water quality. CBO estimates that implementing this legislation over the next 6 years would increase discretionary outlays by about \$158 million. In 1999, \$20 million was appropriated for EPA to administer the Chesapeake Bay program. The bill would not affect direct spending or receipts; therefore, pay-as-you-go procedures would not apply.

S.492 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). Any expenditures made by State and local governments to satisfy the matching requirements of grants authorized by this bill would be voluntary.

Estimated Cost to the Federal Government

For purposes of this estimate, CBO assumes that the amounts authorized will be appropriated for each fiscal year and that outlays will occur at rates similar to those of past appropriations for EPA activities associated with the Chesapeake Bay program. The estimated impact of S. 492 is shown in the following table. The costs of this legislation fall within budget function 300 (natural resources and the environment).

By Fiscal Year, in Millions of Dollars

	2000	2001	2002	2003	2004	2005
SPENDING SUBJECT TO APPROPRIATION						
Authorization Level ^a	30	30	30	30	30	30
Estimated Outlays	15	24	29	30	30	30

^aThe EPA Chesapeake Bay program office has not yet received a full-year appropriation for 2000.

Pay-as-you-go Considerations: None.

Intergovernmental and Private-Sector Impact: The bill contains no intergovernmental or private-sector mandates as defined in UMRA.

Estimate Prepared by: Federal Costs: Susanne S. Mehlman (226–2860) Impact on State, Local, and Tribal Governments: Shelley Finlayson (225–3220).

Estimate Approved by: Peter H. Fontaine Deputy Assistant Director for Budget Analysis.

CHANGES IN EXISTING LAW

In compliance with section 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill as reported are shown as follows: Existing law proposed to be omitted is enclosed in [black brackets], new matter is printed in *italic*, existing law in which no change is proposed is shown in roman:

FEDERAL WATER POLLUTION CONTROL ACT

(33 U.S.C. 1251 et seq.)

[As Amended Through P.L. 105–394, November 13, 1998]

AN ACT To provide for water pollution control activities in the Public Health Service of the Federal Security Agency and in the Federal Works Agency, and for other purposes.

* * * * *

[SEC. 117. CHESAPEAKE BAY.

[(a) OFFICE.—The Administrator shall continue the Chesapeake Bay Program and shall establish and maintain the Environmental Protection Agency an office, division, or branch of Chesapeake Bay Programs to—

[(1) collect and make available, through publications and other appropriate means, information pertaining to the environmental quality of the Chesapeake Bay (hereinafter in this subsection referred to as the “Bay”);

[(2) coordinate Federal and State efforts to improve the water quality of the Bay;

[(3) determine the impact of sediment deposition in the Bay and identify the sources, rates, routes, and distribution patterns of such sediment deposition; and

[(4) determine the impact of natural and man-induced environmental changes on the living resources of the Bay and the relationships among such changes with particular emphasis placed on the impact of pollutant loadings of nutrients, chlorine, acid precipitation, dissolved oxygen, and toxic pollutants, including organic chemicals and heavy metals, and with special attention given to the impact of such changes on striped bass.

[(b) INTERSTATE DEVELOPMENT PLAN GRANTS.—

[(1) AUTHORITY.—The Administrator shall, at the request of the Governor of a State affected by the interstate management plan developed pursuant to the Chesapeake Bay Program (hereinafter in this section referred to as the “plan”), make a grant for the purpose of implementing the management mechanisms contained in the plan if such State has, within 1 year after the date of the enactment of this section, approved and committed to implement all or substantially all aspects of the

plan. Such grants shall be made subject to such terms and conditions as the Administrator considers appropriate.

[(2) SUBMISSION OF PROPOSAL.—A State or combination of States may elect to avail itself of the benefits of this subsection by submitting to the Administrator a comprehensive proposal to implement management mechanisms contained in the plan which shall include (A) a description of proposed abatement actions which the State or combination of States commits to take within a specified time period to reduce pollution in the Bay and to meet applicable water quality standards, and (B) the estimated cost of the abatement actions proposed to be taken during the next fiscal year. If the Administrator finds that such proposal is consistent with the national policies set forth in section 101(a) of this Act and will contribute to the achievement of the national goals set forth in such section, the Administrator shall approve such proposal and shall finance the costs of implementing segments of such proposal.

[(3) FEDERAL SHARE.—Grants under this subsection shall not exceed 50 percent of the costs of implementing the management mechanisms contained in the plan in any fiscal year and shall be made on condition that non-Federal sources provide the remainder of the cost of implementing the management mechanisms contained in the plan during such fiscal year.

[(4) ADMINISTRATIVE COSTS.—Administrative costs in the form of salaries, overhead, or indirect costs for services provided and charged against programs or projects supported by funds made available under this subsection shall not exceed in any one fiscal year 10 percent of the annual Federal grant made to a State under this subsection.

[(c) REPORTS.—Any State or combination of States that receives a grant under subsection (b) shall, within 18 months after the date of receipt of such grant and biennially thereafter, report to the Administrator on the progress made in implementing the interstate management plan developed pursuant to the Chesapeake Bay Program. The Administrator shall transmit each such report along with the comments of the Administrator on such report to Congress.

[(d) AUTHORIZATION OF APPROPRIATIONS.—There are hereby authorized to be appropriated the following sums, to remain available until expended, to carry out the purposes of this section:

[(1) \$3,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, and 1990, to carry out subsection (a); and

[(2) \$10,000,000 per fiscal year for each of the fiscal years 1987, 1988, 1989, and 1990, for grants to States under subsection (b).]

SEC. 117. CHESAPEAKE BAY.

(a) *DEFINITIONS.—In this section:*

(1) *ADMINISTRATIVE COST.—The term “administrative cost” means the cost of salaries and fringe benefits incurred in administering a grant under this section.*

(2) *CHESAPEAKE BAY AGREEMENT.—The term “Chesapeake Bay Agreement” means the formal, voluntary agreements executed to achieve the goal of restoring and protecting the Chesa-*

apeake Bay ecosystem and the living resources of the Chesapeake Bay ecosystem and signed by the Chesapeake Executive Council.

(3) *CHESAPEAKE BAY ECOSYSTEM.*—*The term “Chesapeake Bay ecosystem” means the ecosystem of the Chesapeake Bay and its watershed.*

(4) *CHESAPEAKE BAY PROGRAM.*—*The term “Chesapeake Bay Program” means the program directed by the Chesapeake Executive Council in accordance with the Chesapeake Bay Agreement.*

(5) *CHESAPEAKE EXECUTIVE COUNCIL.*—*The term “Chesapeake Executive Council” means the signatories to the Chesapeake Bay Agreement.*

(6) *SIGNATORY JURISDICTION.*—*The term “signatory jurisdiction” means a jurisdiction of a signatory to the Chesapeake Bay Agreement.*

(b) *CONTINUATION OF CHESAPEAKE BAY PROGRAM.*—

(1) *IN GENERAL.*—*In cooperation with the Chesapeake Executive Council (and as a member of the Council), the Administrator shall continue the Chesapeake Bay Program.*

(2) *PROGRAM OFFICE.*—

(A) *IN GENERAL.*—*The Administrator shall maintain in the Environmental Protection Agency a Chesapeake Bay Program Office.*

(B) *FUNCTION.*—*The Chesapeake Bay Program Office shall provide support to the Chesapeake Executive Council by.*—

(i) *implementing and coordinating science, research, modeling, support services, monitoring, data collection, and other activities that support the Chesapeake Bay Program;*

(ii) *developing and making available, through publications, technical assistance, and other appropriate means, information pertaining to the environmental quality and living resources of the Chesapeake Bay ecosystem;*

(iii) *in cooperation with appropriate Federal, State, and local authorities, assisting the signatories to the Chesapeake Bay Agreement in developing and implementing specific action plans to carry out the responsibilities of the signatories to the Chesapeake Bay Agreement;*

(iv) *coordinating the actions of the Environmental Protection Agency with the actions of the appropriate officials of other Federal agencies and State and local authorities in developing strategies to.*—

(I) *improve the water quality and living resources in the Chesapeake Bay ecosystem; and*

(II) *obtain the support of the appropriate officials of the agencies and authorities in achieving the objectives of the Chesapeake Bay Agreement; and*

(v) *implementing outreach programs for public information, education, and participation to foster stewardship of the resources of the Chesapeake Bay.*

(c) *INTERAGENCY AGREEMENTS.*—*The Administrator may enter into an interagency agreement with a Federal agency to carry out this section.*

(d) *TECHNICAL ASSISTANCE AND ASSISTANCE GRANTS.*—

(1) *IN GENERAL.*—*In cooperation with the Chesapeake Executive Council, the Administrator may provide technical assistance, and assistance grants, to nonprofit organizations, State and local governments, colleges, universities, and interstate agencies to carry out this section, subject to such terms and conditions as the Administrator considers appropriate.*

(2) *FEDERAL SHARE.*—

(A) *IN GENERAL.*—*Except as provided in subparagraph (B), the Federal share of an assistance grant provided under paragraph (1) shall be determined by the Administrator in accordance with guidance issued by the Administrator.*

(B) *SMALL WATERSHED GRANTS PROGRAM.*—*The Federal share of an assistance grant provided under paragraph (1) to carry out an implementing activity under subsection (g)(2) shall not exceed 75 percent of eligible project costs, as determined by the Administrator.*

(3) *NON-FEDERAL SHARE.*—*An assistance grant under paragraph (1) shall be provided on the condition that non-Federal sources provide the remainder of eligible project costs, as determined by the Administrator.*

(4) *ADMINISTRATIVE COSTS.*—*Administrative costs shall not exceed 10 percent of the annual grant award.*

(e) *IMPLEMENTATION AND MONITORING GRANTS.*—

(1) *IN GENERAL.*—*If a signatory jurisdiction has approved and committed to implement all or substantially all aspects of the Chesapeake Bay Agreement, on the request of the chief executive of the jurisdiction, the Administrator.—*

(A) *shall make a grant to the jurisdiction for the purpose of implementing the management mechanisms established under the Chesapeake Bay Agreement, subject to such terms and conditions as the Administrator considers appropriate;*

(B) *may make a grant to a signatory jurisdiction for the purpose of monitoring the Chesapeake Bay ecosystem.*

(2) *PROPOSALS.*—

(A) *IN GENERAL.*—*A signatory jurisdiction described in paragraph (1) may apply for a grant under this subsection for a fiscal year by submitting to the Administrator a comprehensive proposal to implement management mechanisms established under the Chesapeake Bay Agreement.*

(B) *CONTENTS.*—*A proposal under subparagraph (A) shall include.—*

(i) *a description of proposed management mechanisms that the jurisdiction commits to take within a specified time period, such as reducing or preventing pollution in the Chesapeake Bay and its watershed or meeting applicable water quality standards or established goals and objectives under the Chesapeake Bay Agreement; and*

(ii) the estimated cost of the actions proposed to be taken during the fiscal year.

(3) *APPROVAL.*—If the Administrator finds that the proposal is consistent with the Chesapeake Bay Agreement and the national goals established under section 101(a), the Administrator may approve the proposal for an award.

(4) *FEDERAL SHARE.*—The Federal share of an implementation grant under this subsection shall not exceed 50 percent of the cost of implementing the management mechanisms during the fiscal year.

(5) *NON-FEDERAL SHARE.*—An implementation grant under this subsection shall be made on the condition that non-Federal sources provide the remainder of the costs of implementing the management mechanisms during the fiscal year.

(6) *ADMINISTRATIVE COSTS.*—Administrative costs shall not exceed 10 percent of the annual grant award.

(7) *REPORTING.*—On or before October 1 of each fiscal year, the Administrator shall make available to the public a document that lists and describes, in the greatest practicable degree of detail.—

(A) all projects and activities funded for the fiscal year;

(B) the goals and objectives of projects funded for the previous fiscal year; and

(C) the net benefits of projects funded for previous fiscal years.

(f) *FEDERAL FACILITIES AND BUDGET COORDINATION.*—

(1) *SUBWATERSHED PLANNING AND RESTORATION.*—A Federal agency that owns or operates a facility (as defined by the Administrator) within the Chesapeake Bay watershed shall participate in regional and subwatershed planning and restoration programs.

(2) *COMPLIANCE WITH AGREEMENT.*—The head of each Federal agency that owns or occupies real property in the Chesapeake Bay watershed shall ensure that the property, and actions taken by the agency with respect to the property, comply with the Chesapeake Bay Agreement, the Federal Agencies Chesapeake Ecosystem Unified Plan, and any subsequent agreements and plans.

(3) *BUDGET COORDINATION.*—

(A) *IN GENERAL.*—As part of the annual budget submission of each Federal agency with projects or grants related to restoration, planning, monitoring, or scientific investigation of the Chesapeake Bay ecosystem, the head of the agency shall submit to the President a report that describes plans for the expenditure of the funds under this section.

(B) *DISCLOSURE TO THE COUNCIL.*—The head of each agency referred to in subparagraph (A) shall disclose the report under that subparagraph with the Chesapeake Executive Council as appropriate.

(g) *CHESAPEAKE BAY PROGRAM.*—

(1) *MANAGEMENT STRATEGIES.*—The Administrator, in coordination with other members of the Chesapeake Executive Council, shall ensure that management plans are developed

and implementation is begun by signatories to the Chesapeake Bay Agreement to achieve and maintain.—

(A) the nutrient goals of the Chesapeake Bay Agreement for the quantity of nitrogen and phosphorus entering the Chesapeake Bay and its watershed;

(B) the water quality requirements necessary to restore living resources in the Chesapeake Bay ecosystem;

(C) the Chesapeake Bay Basinwide Toxins Reduction and Prevention Strategy goal of reducing or eliminating the input of chemical contaminants from all controllable sources to levels that result in no toxic or bioaccumulative impact on the living resources of the Chesapeake Bay ecosystem or on human health;

(D) habitat restoration, protection, and enhancement goals established by Chesapeake Bay Agreement signatories for wetlands, riparian forests, and other types of habitat associated with the Chesapeake Bay ecosystem; and

(E) the restoration, protection, and enhancement goals established by the Chesapeake Bay Agreement signatories for living resources associated with the Chesapeake Bay ecosystem.

(2) SMALL WATERSHED GRANTS PROGRAM.—The Administrator, in cooperation with the Chesapeake Executive Council, shall.—

(A) establish a small watershed grants program as part of the Chesapeake Bay Program; and

(B) offer technical assistance and assistance grants under subsection (d) to local governments and nonprofit organizations and individuals in the Chesapeake Bay region to implement.—

(i) cooperative tributary basin strategies that address the water quality and living resource needs in the Chesapeake Bay ecosystem; and

(ii) locally based protection and restoration programs or projects within a watershed that complement the tributary basin strategies.

(h) STUDY OF CHESAPEAKE BAY PROGRAM.—

(1) IN GENERAL.—Not later than April 22, 2000, and every 5 years thereafter, the Administrator, in coordination with the Chesapeake Executive Council, shall complete a study and submit to Congress a comprehensive report on the results of the study.

(2) REQUIREMENTS.—The study and report shall.—

(A) assess the state of the Chesapeake Bay ecosystem;

(B) assess the appropriateness of commitments and goals of the Chesapeake Bay Program and the management strategies established under the Chesapeake Bay Agreement for improving the state of the Chesapeake Bay ecosystem;

(C) assess the effectiveness of management strategies being implemented on the date of enactment of this section and the extent to which the priority needs are being met;

(D) make recommendations for the improved management of the Chesapeake Bay Program either by strengthen-

ing strategies being implemented on the date of enactment of this section or by adopting new strategies; and

(E) be presented in such a format as to be readily transferable to and usable by other watershed restoration programs.

(i) SPECIAL STUDY OF LIVING RESOURCE RESPONSE.—

(1) IN GENERAL.—Not later than 180 days after the date of enactment of this section, the Administrator shall commence a 5-year special study with full participation of the scientific community of the Chesapeake Bay to establish and expand understanding of the response of the living resources of the Chesapeake Bay ecosystem to improvements in water quality that have resulted from investments made through the Chesapeake Bay Program.

(2) REQUIREMENTS.—The study shall.—

(A) determine the current status and trends of living resources, including grasses, benthos, phytoplankton, zooplankton, fish, and shellfish;

(B) establish to the extent practicable the rates of recovery of the living resources in response to improved water quality condition;

(C) evaluate and assess interactions of species, with particular attention to the impact of changes within and among trophic levels; and

(D) recommend management actions to optimize the return of a healthy and balanced ecosystem in response to improvements in the quality and character of the waters of the Chesapeake Bay.

(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$30,000,000 for each of fiscal years 2000 through 2005.

